10B. ***Described the magnitude of the proposed lowering of water quality. Include the anticipated impact of the proposed lowering of water quality on aquatic life and wildlife, including threatened and endangered species, important commercial or recreational sport fish species, other individual species, and the overall aquatic community structure and function. Include a Corps of Engineers approved wetland delineation. (OAC 3745-1-05 (C)(6)(a, b)) and OAC 3745-1-54)***

PREFERRED ALTERNATIVE

Magnitude of Proposed Lowering of Water Quality:

Changes to Aquatic Life and Wildlife Habitat: Approximately 7161 linear feet of intermittent stream, 2002 linear feet of ephemeral stream and 1.774 acres of wetlands will be impacted as a result of this project. This impact will result in the removal of 100% of the aquatic life habitat within these segments and the 100% removal of any potential wildlife habitat associated with their riparian corridor.

Change in Chemical Water Quality: The proposed Preferred Alternative will impact surface water quality in the receiving streams during the early stages of construction. Sediment loads to the drainage system will be increased. The quantity of sediments reaching surface waters will be minimized by directing all runoff through sedimentation ponds.

Changes in Flow Regime: The Preferred Alternative is expected to reduce base flows and peak flows in the downstream section of the unnamed tributary to Piney Creek due to the retention characteristics of the proposed sediment and quality control ponds. Runoff from the project or disturbed areas presently contributing to stream flow will be directed to sediment ponds. However, the tributary, which has intermittent flow during summer months have no downstream users. The tributary discharges into Piney Creek, a tributary of Captina Creek. Since the affected area drained by the unnamed tributary represents a small percentage of the Captina Creek drainage basin, there should not be any recognizable difference in quantity flow in Captina Creek. It is predicted that the proposed operation will not result in any significant adverse impacts on surface water quantity in the area.

Prior to commencing with the construction operation discharge within the impacted stream segments will be diverted around the construction site. The areas adjacent to and the stream channels will be graded with fill placed within the impacted segments in preparation for construction. The stream will no longer function as a stream and the pre-construction flow regime will not be reestablished within the disturbed segments.

The Ohio Department of Natural Resources has no record of rare, threatened, endangered or protected species in the project area (See Wetlands Delineation Report, Section 3.5).

Attached is a Wetlands Verification Report issued by the Corps of Engineers.

MINIMAL DEGRADATION ALTERNATIVE

Magnitude of Proposed Lowering of Water Quality:

Changes to Aquatic Life and Wildlife Habitat: The Minimal Degradation Alternative will have no impact on the aquatic life habitat within the project area.

Change in Chemical Water Quality: The proposed Minimal Degradation Alternative will impact surface water quality in the receiving streams during construction and operation of the facility. Sediment loads to the drainage system will be increased. The quantity of sediments reaching surface waters will be minimized by directing all runoff through sedimentation ponds.